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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,040	04/12/2001	DeWitt C. Seward IV	301493.1001-001	1765

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EXAMINER

KERVEROS, JAMES C

ART UNIT PAPER NUMBER

2858

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/834,040

Applicant(s)

SEWARD ET AL.

Examiner

James C Kerveros

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 9-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Election/Restrictions***

Claims 1-4 and 6-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Applicant's election without traverse of Group I, Species B, claims 5-8 in Paper No. 10 is acknowledged.

### ***Specification***

The abstract of the disclosure is objected to because it fails to comply with the proper language and format. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Objections***

Claims 5-8 are objected to because of the following informalities: Independent Claim 5 lacks proper preamble. Claims 6-8 fail to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by

Gerhard (US 3942107), ISSUED: March 2, 1976.

Regarding Claim 5, Gerhard discloses a single –feed microstrip resonant sensor, shown in (Figure 1), with electrical signals applied via a coaxial conductor (16) and circuitry suitable for applying microwave signals through the coaxial conductor (16) and for measuring power reflected from the resonant circuit, shown in (FIGURE 3).

Regarding Claim 6, Gerhard discloses a sample film ceramic substrate (11) whose dielectric constant is to be measured, by the single–feed microstrip resonant sensor. The ceramic substrate (11) is disposed between two thin, nonconductive

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flexible sheets, 12 and 13, which create a fixed gap equivalent to the width of the flexible sheets, between sample (11) and conductive patterns 14 and 15 respectively, as shown in (FIGURE 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

~~Gerhard (US 3942107); ISSUED: March 2, 1976.~~

Regarding Claims 7 and 8, Gerhard does not measure the sample dielectric property within  $2.5 \lambda$  of the sensor having fixed air gap between the sensor and the sample.

Since in this case, the wavelength  $\lambda$  does not have any definite numerical value, one may assign a range of wavelength values proportional to the signal of varying microwave frequencies applied by an RF sweep oscillator (31) to the substrate (11) under test.

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It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to assign appropriate wavelength values proportional to the thickness of flexible sheets (12 and 13) as taught by Gerhard, for calculating the proper air gap between the sensor and the sample, as to provide an improved method for nondestructively measuring an electrical characteristic of a material.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dworsky et al. (US 4446432), in Method for determining surface contour of piezoelectric wafers, May 1, 1984, discloses air gap (28) formed between the probe forward end and the face of the quartz plate as shown in (FIGURE 1).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. KERVEROS at (703) 305-1081 or the examiner's supervisor, N. LE at (703) 308-1436.

Any inquiry of a general nature relating to this application should be directed to the receptionist at (703) 305-4900.

The official Fax numbers for the organization are (703-872-9318) Before-Final and (703-872-9319) After-Final Office actions.

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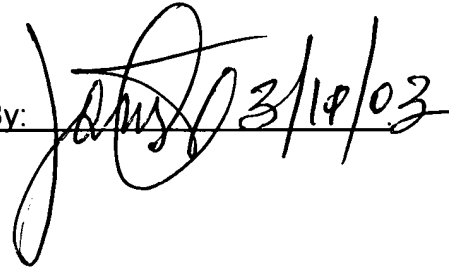
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JAMES C. KERVEROS

Patent Examiner,  
Art Unit 2858, CP4 8D03

Date: 3/11/03  
File: Non-Final Rejection

By:  3/11/03